



Establishing Credibility in AI Chatbots: The Importance of Customization, Communication Competency and User Satisfaction

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Abstract. The study aims to investigate the effects of AI chatbot communication competencies on its credibility. The problems commonly associated with AI chatbots in communication include (i) lack of natural language understanding; (ii) limited contextual understanding; (iii) inability to handle complex queries and (iv) lack of emotional intelligence. These research questions aim to further explore and understand the effects of AI chatbot's communication capabilities on its credibility, considering factors of self-disclosure, empathy, social relaxation, interaction management, assertiveness, altercentrism, expressiveness, supportiveness, immediacy, environmental control, customization, satisfaction and credibility. The methodology involved conducting a survey among 306 respondents who were China Xiaohongshu users to gather data for the study. The research findings underscore the substantial contribution of communication competency to chatbot credibility, thereby emphasizing the ongoing need for continuous improvement in communication skills. Through the enhancement of credibility, chatbots can gain user trust, satisfaction, and acceptance. This research underscores the significance of communication competency in shaping successful chatbot interactions, and it lays the groundwork for future advancements in chatbot development.

Keywords: AI Chatbot, Communication Competency, Credibility, Conversational Agent.

1 Introduction

The use of AI chatbots had been increasing significantly across a wide range of industries due to their numerous benefits and applications. It assists in the fields of customer services, online shopping, healthcare, education, finance and banking. AI chatbots are being utilized more and more in customer care enabling 24/7 availability, rapid responses to consumer inquiries, and freeing up human agents for more difficult work. Chatbots with artificial intelligence improve the effectiveness of customer care according to a study by Andrade & Tumelero. [1] On online shopping platforms, chatbots can assist users in finding products, completing purchases, and solving problems. A chatbot allows 24-hour customer support, personalised engagement, and

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no waiting time, studies that found chatbots helped organisations save money and time. Chatbots save businesses time and money since numerous operations can be automated and employees can be assigned to more difficult jobs [2], [3]. Chatbots are also being used to set up appointments, check patient health, and offer health advice. A report predicted that the market for artificial intelligence in healthcare is estimated to grow at a compound annual growth rate (CAGR) formula-based 51.9% from 2022 to 2030, reaching USD 12.22 billion [4]. Additionally, Chatbots are used in educational institutions to personalize learning experiences, respond to student inquiries, and streamline administrative procedures. A report shows that the Education Market size was valued at USD 1.10 Billion in 2020 and is projected to reach USD 21.52 Billion by 2028, growing at a CAGR of 45.21% from 2021 to 2028 [5]. Chatbots are used to deliver individualized financial advice, automate transactions, and respond quickly to consumer inquiries. Banks are increasingly relying on AI for basic customer care or using virtual assistants to expand their use of AI to enhance the client experience [6]. The rising use of chatbots is also a result of the surge in the popularity of messaging apps. Many of these AI systems are deployed on popular chatbot platforms such as Microsoft, Google, Facebook and Amazon to reach a bigger audience and provide customers with greater convenience [7]. These facts highlight the importance and expanding applicability of AI chatbots in various domains, particularly in marketing and customer service. As AI technology continues to evolve, it's reasonable to anticipate that the role and impact of chatbots will further broaden in the future.

The use of live chatbot interfaces to interact with customers has become an increasingly popular means of providing real-time customer service in many contexts. Although these conversational software agents or Chatbots frequently replace human live chat operators; AI Chatbots still frequently fail to meet customer expectations, potentially making customers less likely to comply with the chatbot's demands and less likely to use it [2]. Despite the fact that using public datasets can make the system reply naturally, it is believed that AI Chatbots are still inefficient [8]. Researchers must put in a lot of effort to make it trainable. AI chatbots will become more experienced and provide accurate service and information as more and more real conversation data is inputted. Besides this, the use of communication approaches to human-chatbot interactions is subject to debate. For instance, people can quickly detect conversational agents in interactions due to their inappropriate or scripted messages [9]. Thus, interpersonal communication competency may be seen as an essential competence for regulating the behaviour of the user in certain circumstances. A study on chatbots advocated relationship development design may require a broader focus on social competence and communication competence[10]. Another issue of chatbots is a lack of consistent dialogue context that is aligned with the business objectives for customer service support Chatbots [2]. The deployment of conversational agents always hampered by problems with system trust. A chatbot's communication competencies are important as a trust-building factor[11], [12]. Users need to feel confident that the AI system will understand their needs and respond appropriately. This trust develops gradually but can be undermined by misunderstandings, inaccuracies, or a perceived inability to empathize or understand.

The objectives of the study are to investigate the effects of customization, communication competency and user satisfaction on credibility that are most relevant in the context of AI chatbots. The study examines the role of communication competency in enhancing credibility, by measuring the extent to which a chatbot's communication skills contribute to its perceived credibility. The significance of this study lies in its potential to redefine the development and implementation of AI chatbots across various sectors. The study provides distinct insights into user perception and trust-building which promotes user engagement and satisfaction towards AI chatbots.

2 Literature Review

2.1 Communication Competency of Chatbot

The ability to demonstrate communicational competence is critical for functional human-human interaction and relationships. The employment of artificial intelligence, machine learning, and natural language processing by chatbots enables them to converse with users in the same manner as people do using natural language. Chatbots had been continually developed their communication competencies and knowledge on personalizing messages and improving communication rules and reactions [13].

Past research had demonstrated that the interaction with artificial agents was in a manner akin to the same way they interact with humans [5]. This establishes the capabilities that these chatbots must possess to give the user a positive user experience and interaction. Such a user experience of interacting with a chatbot can be assessed using ten competencies including self-disclosure, empathy, social relaxation, interaction management, assertiveness, altercentrism, expressiveness, supportiveness, immediacy, and environmental control [9].

A study indicates that a chatbot that made its own self-disclosures was more effective in facilitating its users' self-disclosures particularly to sensitive questions, it successfully encouraged users to provide detailed responses and express deeper thoughts and feelings on sensitive topics [14]. In short, the study discovered that deeper participant self-disclosure was reciprocally promoted by chatbot self-disclosure.

Self-disclosure involves a chatbot's openness about its functionality, programming, and limitations. This transparency helps manage user expectations, mitigating dissatisfaction due to unfulfilled anticipations. Furthermore, self-disclosure can educate the user about the functionality of technology, fostering an understanding of the AI and enabling more effective interactions. Users should expect more meaningful interactions with chatbots thanks to this relationship of transparency.

A study shows that users are more tolerant of a chatbot's functional limitations when user experiences the emotional connection of empathy expressed by the chatbot [15]. Empathy in the context of AI chatbots refers to the capacity to identify, comprehend, and appropriately react to users' emotional states. According to social response theory and anthropomorphism theory, while interacting with humans, chatbots may be perceived as more trustworthy if they are sympathetic and helpful; as a result, empathy is positively correlated with users' trust in the chatbot [16]. An emotional connection is

established with the user when an empathetic chatbot mimics their feelings in its responses. This bond promotes trust and raises their level of happiness with the encounter as a whole.

Chatbots can mimic human communication and networking skills as the field of research into human-machine interaction continues to develop. One of the capabilities is social relaxation[17]. The term "social relaxation competency" describes the chatbot's capacity to provide a friendly and comfortable atmosphere for communication. This could be achieved by speaking in a warm and casual manner, using humour when appropriate, and showing patience while responding to user inquiries. A relaxed environment encourages users to engage more deeply with the chatbot, improving the entire experience.

A research study revealed that communication competency, which is computerised by the chatbot's communicative knowledge and skills, such as listening and speaking skills and interaction management, is crucial for effective healthcare counseling [18]. Interaction management involves the chatbot's capability to guide the conversation effectively with the user. To achieve this, the chatbot must ask appropriate questions, offer clear and logical answers, and correctly translate user inputs. An engaging and rewarding user experience depends on managing the conversation's pace, complexity, and direction.

A chatbot's assertiveness pertains to its capacity to respond firmly or directly to a user's rude behaviour. This could imply that the chatbot actively confronted or addressed the rudeness after recognising the user's inappropriate tone or language. Chatbots used to respond when they detected verbal abuse, but Apple's Siri recently updated its chatbot to respond to those abusive comments in non-provocative ways [19]. The chatbot's reaction can be intended to set clear boundaries, promote courteous conversation, or stop more disrespectful behaviour. As a result, the chatbot might have found it difficult to address the user's rudeness or set its own boundaries in the interaction.

A chatbot displays altercentrism when it focuses on the user's needs, interests, and preferences [20]. A sense of respect and value for the user is fostered by personalizing the interaction according to user preferences and responding in a user-centric manner. This approach increases the likelihood of long-term user engagement and satisfaction. Regardless of whether the chatbot communicates through verbal or non-verbal means, it should be capable of conveying its messages in an effective, clear, and engaging manner. This expressiveness competency can be demonstrated using appropriate language, tone, and context-specific responses that are both understandable and appealing to users. The expressiveness of a chatbot allows citizens to engage with government entities more vividly in their day-to-day language, serving both their information-seeking and transactional needs [21]. The user experience may be positively impacted by such good communication.

A chatbot demonstrates supportiveness by aiding users in various forms without passing judgement. This could entail giving pertinent information, assisting users through procedures, or providing emotional support [9]. Timely and accurate support can foster a sense of being cared for and respected, which enhances user satisfaction.

The capacity of the chatbot to react quickly to user inputs is referred to as immediate competency, which helps to maintain a natural and interesting conversation flow. A significant portion of clients, according to research, will always prefer a chatbot over human customer service representatives if doing so saves them time. As a result, one of the key benefits of chatbots for customer service is their capacity to offer 24/7 support. can cause annoyance and even disengagement. Thus, immediate responses are essential for maintaining user engagement.

Whether it be a messaging app, a website, or a mobile app, environmental control competency entails the chatbot's capacity to communicate what it can and cannot do to create the proper expectation [9]. The chatbot can provide a favourable and consistent user experience across various interaction contexts by clearly communicating its capabilities and limitations.

Thus, the chatbot's communication skills help to establish credibility by ensuring that it communicates with people in a way that is clear, relevant, consistent, sympathetic, responsive, and truthful. Users are more likely to trust the chatbot and regard it as a reliable source of information or assistance when these communication abilities are met. This study proposes hypothesis H1 to investigate the relationship between Chatbot communication competency and credibility.

H1. The communication competency of a chatbot positively impacts its perceived credibility.

2.2 Customisation As a Credibility Builder

Customization is a type of personalised experience that is important for increasing user satisfaction and trust. A chatbot that can accommodate specific user needs demonstrates to the user that the brand values their preferences and needs. The high level of personalisation in AI chatbots also helps to tailor discussion text based on the user's skills, language, educational level, and preferences, and in turn, does so by influencing the level of readability [22]. This sense of personal care can foster trust, as users are more likely to trust a brand that shows understanding and consideration of their personal needs.

Chatbots communicate that a brand values the consumer's experience when a representative genuinely cares about helping a customer. Customer trust can be gained by a chatbot that shows a genuine interest in resolving problems since it demonstrates the brand's dedication to ensuring customer satisfaction [23]. Customers are more inclined to view a brand as reliable and trustworthy when they believe that their problems are being taken seriously.

The prompt and successful settlement of consumer complaints is a crucial element in fostering confidence. When a chatbot responds to complaints in a straightforward and timely manner, it reflects well on the brand's efficiency and responsiveness. A study found that responsiveness, a capacity to act promptly and effectively in response to user requests could be a key determinant of how much trust users have in chatbots [24]. This can enhance brand trust as users gain confidence that any future issues they might encounter will be addressed in a timely and competent manner.

Brand trust depends on consumer perceptions of a chatbot's perceived competency, which measures how much they think it can carry out a task or deliver accurate information. Customers are more inclined to trust and rely on a chatbot for assistance when they believe it to be competent [25]. When a chatbot repeatedly displays that it can carry out its duties, it strengthens consumer confidence in the brand's ability. Trust in a chatbot is often reflected as trust in the brand, as users connect the chatbot's capabilities with the overall reliability and proficiency of the brand.

Overall, these factors contribute to a more personalized and efficient user experience, which in turn increases trust in the brand. As chatbots reflect the brand they represent, their ability to meet user needs, show interest in problem-solving, solve problems effectively, and demonstrate their capabilities are all crucial in establishing and strengthening brand trust. The purpose of this study is to add to the body of literature by proposing hypothesis H2, which will examine the connection between Chatbot customization and credibility.

H2. The customisation of a chatbot positively impacts its perceived credibility.

2.3 User Satisfaction and Its Role in Bolstering Chatbot Credibility

User satisfaction plays a crucial role in establishing the credibility of a chatbot. Users judge a chatbot to be effective when it helps them accomplish their objectives, when As consumers grow to trust the chatbot's capacity to carry out its role consistently, their satisfaction with the chatbot's efficacy can transfer into higher credibility.

User satisfaction can be increased via a positive user experience, which is characterised by a simple interface, effective interactions, and easy navigation. User satisfaction with chatbots was influenced by perceived functional and experiential values [26]. This favourable experience increases the chatbot's design and functionality, thereby enhancing its credibility.

The capacity of a chatbot to develop an emotional connection with users, frequently using personalised responses or empathetic language, can also contribute to user satisfaction. The three components of pleasure, assurance, and empathy have all been demonstrated to significantly affect satisfaction, according to a study that focused on increasing chatbot service quality in mainland China [27]. When users sense that they are valued and appreciated, they are more inclined to view both the chatbot and the brand it represents as credible.

A chatbot that meets or exceeds user expectations tends to lead to higher user satisfaction [28]. When a chatbot consistently delivers on its promises, it builds a reputation of reliability, which bolsters its credibility.

Satisfied users are also more likely to recommend the chatbot to others. A study found that customer satisfaction, which leads to recommendations of the service to others, indirectly influences customer loyalty [29]. This word-of-mouth can expand the chatbot's credibility to new users, who approach the chatbot with an existing positive impression. Satisfied users are more likely to return for future interactions. Regular successful use strengthens a user's trust in the chatbot, which incrementally enhances the chatbot's credibility over time.

User satisfaction doesn't just contribute to a chatbot's credibility—it's essential to it. By ensuring users have a satisfying experience, chatbot developers can enhance the credibility and trustworthiness of their AI. To contribute to the existing body of literature, this study proposes hypothesis H3 to investigate the relationship between Chatbot user satisfaction and credibility. The user's confidence in the chatbot grows over time as a result of consistent success, thus boosting the chatbot's credibility.

H3. User satisfaction with a chatbot positively impacts its perceived credibility.

2.4 Chatbot Credibility

Credibility and trust in chatbots are crucial elements that can have a big impact on user adoption and interaction frequency. Credibility refers to the believability and reliability of the chatbot. It is the extent to which users perceive the chatbot as honest, trustworthy, and credible in performing its tasks. Factors contributing to a chatbot's credibility include (i) accuracy; (ii) trustworthiness; and (iii) credibility [30], [31].

A study on a generative AI chatbot, ChatGPT revealed that users' trust in the technology has been influenced by their perceptions of the accuracy and reliability of its responses [28]. The chatbot's reputation is greatly enhanced by its capacity to give users with accurate and pertinent information. User confidence is increased when responses are consistently accurate and precise.

Transparency and human autonomy are necessary for trustworthy affective chatbots [32]. Transparency is important because it helps to build trust between users and the system. When users understand how the system works, they are more likely to trust it and to use it effectively. Human autonomy is important because it allows users to control how the system is used. In the context of emotion-aware systems, this is particularly significant because users might not want the system to have access to all of their personal information or to make decisions on their behalf.

The credibility of recommendations by chatbots is the believability that the chatbot has been trained on a large and accurate dataset, so it is likely to be able to provide the users with accurate and relevant recommendations [33]. A credible chatbot will consider user preferences and needs while making recommendations.

Successful chatbot conversations depend on both the credibility and the trust of the chatbot. In the long run, they promote better and more meaningful conversations by encouraging users to engage more, share more, and rely more on the chatbot.

3 Research Method

The data were collected in 2023 from regular chatbot users in China who used Xiaohongshu. The potential respondents were invited to do the survey via Facebook, Instagram, WeChat social media platforms and email and the sampling technique employed was convenient sampling. For data analysis, a total of 306 valid responses after data cleaning were used. Social media users who does not have Xiaohongshu account were excluded in the study.

Likert scales with a five-point range to measure customisation, satisfaction and credibility are: strongly disagree (1), disagree (2), slightly agree (3), agree (4) and strongly agree (5). In total, 28 items from earlier research on communication competences created by Skjuve and Brandtzaeg were adapted in this study [9]. This study also used criteria from Cheng and Jiang's study [30] for chatbot customisation, user satisfaction, and credibility.

The researchers piloted a survey with a small group of people to get feedback on the wording of the questions. This can help to identify any questions that are leading, biased, or unclear. A reliability test (Cronbach's alpha) was run on the piloted results to ensure that the instrument was above 0.7 and that the items were consistent and valid. Data cleaning was done to remove duplicated records, convert data to number format and remove outliers using SPSS software. Since the survey was configured to require fields for every question item, there were no missing data.

4 Results

In this study, Partial Least Squares Structural Equation Modeling (PLS-SEM), was used in this investigation. PLS-SEM combines principle components analysis and conventional least squares path analysis. With the help of the statistical programme SmartPLS, the proposed model was examined. Descriptive statistics were used to summarize the demographic details of the respondents. The characteristics of the samples were described in Table 1.

Table 1. Demographics information.

Demographics	Frequency	Percentage (%)
Age		
< 18	34	11
18-23	81	26
24-29	125	41
30 and above	66	22
Gender		
female	135	44
male	124	41
prefer not to say	47	15
Education		
secondary school	16	5
high school	36	12
diploma	66	22
bachelor's degree	92	30

Internal reliability was assessed using Cronbach's values and composite reliability, as indicated in Table 2. All of the constructs' composite reliability and Cronbach's values are above the acceptable cutoff of 0.6 [34]. The average variance extracted (AVE) values and factor loadings are used to assess convergent validity.

Table 2. Construct reliability and validity.

Construct	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
	F			
	a			
	c			
	t			
	o			
	r			
	l			
	o			
	a			
	d			
	i			
	n			
	g			
	s			

Communi-
cation
Competen-
cies

altercentrism	0.739	0.745	0.852	0.657	0.739
	0.606				
	0.732				
assertiveness	0.693	0.693	0.867	0.765	0.693
	0.727				
environmental control	0.746	0.749	0.855	0.663	0.746
	0.672				
	0.652				
empathy	0.792	0.794	0.878	0.706	0.792
	0.706				
	0.68				
expressiveness	0.741	0.753	0.853	0.659	0.741
	0.74				
	0.712				
interaction management	0.830	0.833	0.887	0.662	0.830
	0.685				
	0.738				
	0.749				
immediacy	0.732	0.738	0.882	0.788	0.732
	0.703				
self-disclosure	0.782	0.802	0.873	0.697	0.782
	0.753				
	0.656				
social relaxation	0.653	0.660	0.852	0.742	0.653
	0.744				
supportiveness	0.726	0.734	0.845	0.646	0.726
	0.667				
	0.63				
<hr/>					
Customisation	0.766	0.786	0.792	0.861	0.609
	0.722				
	0.825				
	0.805				
Interaction	0.725	0.786	0.855	0.664	0.751
	0.876				
	0.836				
<hr/>					

Satisfaction	0.650 0.869	0.651	0.851	0.740	0.650
Credibility	0.82 0.883 0.859	0.814	0.815	0.89	0.73

Given that AVE values may be a relatively conservative estimate of the convergent validity, factor loading scores of 0.605 to 0.883, which exceeded the acceptable threshold value of 0.5, and AVE values of 0.609 to 0.83, which exceeded the recommended value of 0.5, support the presence of convergent validity [35]. In addition, discriminant validity was accessed by comparing the square root values of AVE with the inter-construct correlation coefficients [35]. The fact that all of the AVE square root values exceeded their inter-construct correlation coefficients, shows that discriminant validity has been sufficiently achieved.

Table 3. Hypotheses Test Results

Hypothesis	Path coefficient (β)	<i>t</i> -value	<i>p</i> -value	Result
H1: Customisation > Credibility	0.266	2.755	0.006	Supported
H2: Communication_Competyency -> Credibility	0.319	3.003	0.003	Supported
H3: Satisfaction -> Credibility	0.265	3.102	0.002	Supported

Inferential analyses are used to make inferences about the population from the sample data. Table 3 summarizes the results of the hypothesis testing.

The results of the path coefficient analysis revealed significant relationships between the independent variables (customisation, communication competency, and satisfaction) and the dependent variable (credibility). The analysis showed a positive path coefficient of 0.266 ($p < 0.05$) between AI chatbot customisation and credibility. This indicates that customisation, in terms of tailoring the chatbot experience to users' preferences or needs, has a statistically significant impact on enhancing the perceived credibility of the AI chatbot. Thus, H1 is supported. A practical implication of the result that customization enhances the perceived credibility of AI chatbots is to make them have different interfaces/appearances and add more features that match personal preferences and settings.

The path coefficient analysis demonstrated a positive relationship between chatbot communication competency and credibility. The path coefficient was estimated at 0.319 ($p < 0.05$), suggesting that the level of communication competency exhibited by the AI chatbot significantly influences its perceived credibility. Thus, H2 is supported. From practical perspective, The path coefficient analysis demonstrated a positive relationship between chatbot communication competency and credibility. The path coefficient was estimated at 0.319 ($p < 0.05$), suggesting that the level of communication competency exhibited by the AI chatbot significantly influences its perceived credibility. Thus, H2 is supported. For practical purposes, chatbots can be

further improved to increase their communicative competency by allowing users to choose their communication style and the user's cultural background. This will make chatbots more communicatively competent, which will ultimately enhance the perceived credibility of AI chatbots.

The analysis indicated a positive path coefficient of 0.265 ($p < 0.05$) between user satisfaction and chatbot credibility. This implies that higher levels of user satisfaction with the chatbot's performance, responsiveness, and overall experience are associated with increased perceived credibility of the AI chatbot. Thus, H3 is supported. This also indicates that chatbot designers and developers should collect data on user satisfaction with chatbots. This data can be used to improve the satisfaction of chatbot users and to make chatbots more credible in the eyes of users.

Based on the provided results, it appears that chatbot communication competency has the strongest influence on credibility among the factors examined. The path coefficient for chatbot communication competency \rightarrow credibility is the highest among the independent variables, with a value of 0.319 ($p < 0.05$). This suggests that the level of communication competency exhibited by the AI chatbot has a significant impact on its perceived credibility. However, it is important to note that the relative influence of each factor should be further examined through additional analyses or a comprehensive model to gain a more precise understanding of their individual contributions.

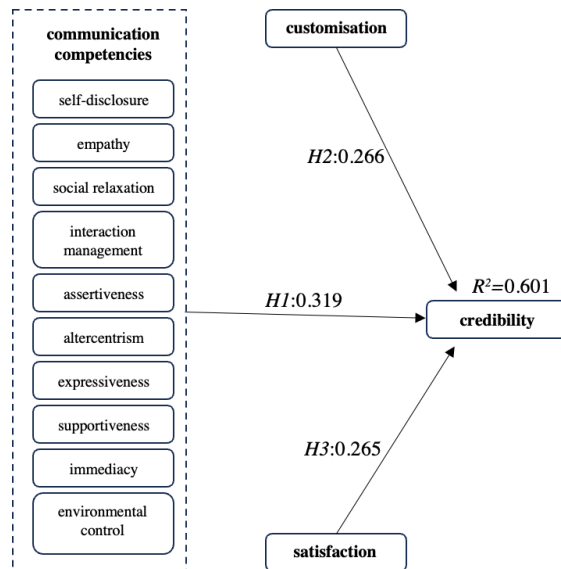


Fig. 1 Structural model result

Fig. 1 shows the structural model results. All hypothesis paths were supported. The R-squared (R^2) result in a structural equation modelling (SEM) model indicates the proportion of variance in the dependent variable that is explained by the independent

variables included in the model. In this case, the R-square of 0.601 indicates that 60.1% of the variance in AI chatbot credibility is explained by customization, communication competency, and satisfaction. An R-square of 0.601 is considered to be a good fit for a SEM model.

5 Discussion

This research adds valuable insight to the existing body of knowledge on customization, communication competency, satisfaction and credibility of chatbots. In this work, the antecedents of credibility in AI chatbots are identified, and their heuristic function is tested. This discovery contributes to the theoretical advancement by elucidating the formation of credibility, the roles played by its antecedents in AI use, and the ways in which credibility may be theorised, quantified, and analysed in relation to AI affordances, this finding has the potential to increase theoretical understanding.

This study extended Beattie et al.'s study [36] of computer-mediated communication of chatbots by adding a satisfaction construct as an antecedent for credibility, in addition to communication competency. Satisfaction is an important antecedent for the credibility of chatbots because it is a measure of how well the chatbot meets the user's expectations. When a user is satisfied with their interaction with a chatbot, they are more likely to believe that the chatbot is credible and trustworthy.

Customization tailors experience to fit individual user needs which leads to increased user satisfaction and trust. In other words, a chatbot caters to individual user's unique preferences and requirements. The results are consistent with earlier research showing that personalization increases credibility and confidence [22], [37]. Users are more likely to trust brands that show that they understand and value their unique demands when they receive this kind of personal attention.

From a practical standpoint, personalization can be a useful tool for enhancing the credibility and user experience of chatbots. Developers may provide a more trustworthy and user-friendly experience by customising the chatbot to each user's demands. A customer care chatbot for an online retailer would serve as a real-world example. If a user has a history of purchasing eco-friendly products, a customized chatbot would recognize this preference and suggest similar products, offer information on the store's sustainability practices or provide details about the eco-friendly materials used in the products. This demonstrates the chatbot's understanding of the user's needs and boosts its credibility.

Chatbot communication competency is important because it contributes to the credibility of the chatbot. A chatbot that can effectively communicate with users is more likely to be seen as credible and reliable. Self-disclosure, empathy, social comfort, interaction management, assertiveness, altercentrism, expressiveness, supportiveness, immediacy, and environmental control are all elements of communication competency skills. According to the results, which are consistent with a previous study [36], consumers are more likely to view chatbots as credible when they can communicate well. This is because these chatbots can converse in a manner resembling how people converse, and they can recognise and react to user emotions.

From the standpoint of practical contribution, there are several factors there are a number of factors that the developer should take into account to enhance the communication skills that support the credibility of chatbots. For instance, chatbots that have the ability to self-disclose might gain users' trust by being open and honest about their capabilities and limitations [14], [38]. When asked about its limits, a chatbot might respond, "Chatbot 'm still under development, I'm not a human, so I don't have the same experiences and emotions as you do."

Additionally, if a chatbot can empathise with users by identifying and responding to their emotional states, its credibility would rise [39]. For example, if a user is feeling frustrated, the chatbot could offer words of encouragement or suggest a different approach to solving the problem. This is important as social relaxation leads to higher credibility [40]. A chatbot's empathetic reaction would sound like this: "Chatbot: I know you're feeling anxious about your upcoming presentation. Let's talk about some ways to reduce your anxiety."

Additionally, a chatbot can also provide a pleasant and comfortable atmosphere for communication by speaking in a nice and informal manner, adding humour, and being patient. This can help users to feel more at ease and to engage more deeply with the chatbot. Users may feel more at ease and interact with the chatbot more fully as a result of this. "Chatbot: I'm so glad you're here! " is an example of a kind and relaxed chatbot response.

A chatbot can also effectively manage conversations by posing appropriate questions, offering clear and logical answers, and correctly interpreting user input. This can help to ensure that users have a positive and satisfying experience. This may contribute to users having a satisfying and positive experience. "Chatbot: I need more information to help you," is an example of a good chatbot response. Could you please be more specific?

Overall, the communication competency of chatbots significantly contributes to their credibility by fostering accurate understanding, meaningful engagement, clear communication, and empathetic interactions. Chatbots can build their credibility by constantly enhancing and perfecting their communication competency, which will promote user acceptance, satisfaction, and trust.

User satisfaction is a key factor in establishing the credibility of a chatbot. Users view a chatbot as reliable and effective when it successfully helps them accomplish their goals. As users grow to trust the chatbot's capacity to carry out its role consistently, which is in line with a previous study [26], user happiness with the chatbot's performance can transfer into higher credibility. For instance, if a chatbot can assist a user in booking a flight, the user is more likely to believe that the chatbot can assist them in the future with other travel-related tasks. A satisfying user experience can also boost user satisfaction. This positive experience fosters trust in the chatbot's design and functionality, thereby enhancing its credibility. For instance, people are more likely to be satisfied with their engagement with a chatbot if it is simple to use and gives succinct and straightforward answers.

User satisfaction is typically higher when a chatbot meets or exceeds their expectations. A chatbot's trust is increased when it consistently fulfils its promises and develops a reputation for reliability. Users are more inclined to trust a chatbot to

respond promptly in the future if, for instance, it constantly complies with its promise to respond within 24 hours. Satisfied users are also more likely to recommend the chatbot to others. This word-of-mouth can expand the chatbot's credibility to new users, who approach the chatbot with an existing positive impression. Satisfied users are also more likely to return for future interactions. Successful use over time increases a user's confidence in the chatbot, which gradually raises the chatbot's credibility.

6 Conclusion

In conclusion, the findings of the study focused on three aspects: (i) Customisation enhances the perceived credibility of AI chatbots; (ii) Communication competency also enhances the perceived credibility of AI chatbots.; and (iii) User satisfaction is positively correlated with the perceived credibility of AI chatbots. Hence, with a focus on the practical implications, chatbot designers and developers can implement these improvements: (i) Chatbots could be tailored to the individual preferences and needs of users, such as by allowing users to choose their own interface, features, and even the name of the chatbot; (ii) Chatbots could use a communication style (verbal and non-verbal cues) and tone that is appropriate for the user's cultural background; and (iii) Collect data on user satisfaction with chatbots, such as usability, feedback, and improvements to level up user satisfaction. Moreover, users are more likely to trust chatbots that have great communication competencies, such as empathy and effective interaction management. Continual improvement and refinement of communication competency are essential for chatbots to enhance their credibility, resulting in increased user trust, satisfaction, and acceptance. Future studies should include qualitative insights into the factors that affect chatbot credibility. It is suggested that researchers consider using different research methods, such as interviews and focus groups, to collect data for future studies that will provide deeper insights into user perceptions of chatbot credibility. While this study is limited to the context of Xiaohongshu, future researchers may investigate chatbot credibility in different contexts and industries. This study is significant because it provides new insights into the factors that affect the perceived credibility of AI chatbots. The findings of this study have the potential to have a broader impact on the field of artificial intelligence, informing the development of more effective AI chatbots.

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